

Notice of Allowability

Application No.

09/669,862

Examiner

ALEX NOGUEROLA

Applicant(s)

HASSELBRINK ET AL.

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment of June 29, 2005.
2. ☒ The allowed claim(s) is/are 1,19,21, 23,28,30 and 32.
3. ☒ The drawings filed on 24 January 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Donald Nissen on August 29, 2005.

The application has been amended as follows:

a) Claim 1, line 9: "widths." has been replaced with – widths, and wherein the reduced effective cross-sectional area comprises a porous material, posts, or columns disposed in the microchannel. –

b) Claims 3 and 4 have been cancelled.

c) Claim 19, line 10: "widths." has been replaced with – widths, and wherein the reduced effective cross-sectional area comprises a porous material, posts, or columns disposed in the microchannel. –

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d) Claim 22 has been cancelled.

e) Claim 28, line 12: "widths." has been replaced with – widths, and wherein the step of modifying includes reducing the geometric cross-sectional area with posts or columns, filling the microchannel with a porous material, or packing the microchannel with structured particles. –

f) Claim 29 has been cancelled.

g) Claim 30, line 5: "long." has been replaced with – long, and wherein the reduced effective cross-sectional area comprises a porous material, posts, or columns disposed in the microchannel. –

h) Claim 33 has been cancelled.

Allowable Subject Matter

2. Claims 1, 19, 21, 23, 28, 30, and 32 are allowed.

3. The following is an examiner's statement of reasons for allowance:

Independent claims 1, 19, and 30 have been amended to require the reduced

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effective cross-sectional area to comprise a porous material, posts, or columns disposed in the microchannel. Independent claim 28 has been amended to require the step of modifying to include reducing the geometric cross-sectional area with posts or columns, filling the microchannel with a porous material, or packing the microchannel with structured particles. Griffiths reduces the effective cross-sectional area of the microchannel proximate the junction by narrowing the microchannel width to form a constriction with constricting and expanding portions. See Figure 12, for example. Sundberg et al. (US 6,090,251) reduces the effective cross-sectional area of the microchannel proximate the junction by narrowing the microchannel with a raised bottom microchannel surface portion. See Figures 7-9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX NOGUEROLA whose telephone number is (571) 272-1343. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NAM NGUYEN can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alex Noguerola
Primary Examiner
AU 1753
August 29, 2005